

IX. THE GENUS DICYSTA CHAMPION (HEMIPTERA).¹

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(ONE TEXT-FIGURE.)

The genus *Dicysta* was founded by Champion (*Biologia Centrali-Americana*, Hemipt.-Heteropt., Vol. II, 1897, p. 5, Pl. I, figs. 4, 4a) upon a single specimen from Panama. As stated in the original description, the genus greatly resembles the more exaggerated forms of *Leptostyla*, except that the foliaceous median carina is developed behind into a large bladder-like structure. The latter inflated process appears very much like the hood in size and shape, and thus distinguishes *Dicysta* from *Leptostyla*, *Corythucha*, *Stephanitis*, and other closely related genera. The lateral carinae are wanting.

The three species described herewith slightly modify the generic description. The hood is somewhat variable in shape and entirely covers the head. In *D. vitrea* Champion, *D. hollandi* n. sp., and *D. brasiliensis* n. sp. the hood is connected posteriorly a little below its crest by the foliaceous median carina and the anterior portion of the median carina is areolate between the hood and its inflated posterior process. In *D. smithi* n. sp. the hood is connected posteriorly near its base by the median carina, and, on the other hand, the median carina is neither strongly raised nor areolate between its inflated posterior process and the hood. The paranota are more or less reflexed; the width and shape varies according to the species. The metasternal orifice is distinct, except in *D. vitrea*, where it is more or less distinct. The length of the rostrum and wings is somewhat variable. The elytra are twice as long as the abdomen, but the shape is quite variable. The head usually bears three frontal spines, one on each side of the median line, and a median spine placed a little above the lateral spines. The species are all neotropical and nothing is known concerning their food-plants and habits.

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KEY TO THE SPECIES OF DICYSTA.

1. Median carina strongly raised and areolate between its inflated posterior process and the hood, connected with the latter a little below the crest; costal area with three or more rows of areolæ at its widest part. 2.
- 1a. Median carina neither foliaceous nor areolate between its inflated posterior process and the hood, connected with the latter at the base; costal area moderately wide, biseriata. *D. smithi* n. sp. (No. 4).
2. Paranota moderately wide, only slightly reflexed, biseriata; elytra with rather small tumid elevations, the lateral margins diverging posteriorly to the rounded tips. *D. braziliensis* n. sp. (No. 3).
- 2a. Paranota very wide, strongly reflexed, with four or five rows of areolæ; elytra with large tumid elevations, the lateral margins from about the basal third to the rounded tips, nearly parallel on posterior two-thirds. . . 3.
3. Paranota shell-shaped, very strongly recurved, the under surface of the distal row of areolæ visible above. *D. vitrea* Champion (No. 1).
- 3a. Paranota with the anterior and posterior margins very strongly recurved; the lateral margins not recurved at all (see fig. 1, *a* and *b*).
D. hollandi n. sp. (No. 2).

1. *Dicysta vitrea* Champion.

Dicysta vitrea CHAMPION, Biol. Centr.-Amer., Hemipt.-Heteropt., vol. II, 1897, p. 5, Pl. 1, figs. 4, 4a.

The type of this species, collected at Volcan de Chiriqui, Brazil, is figured and described by Champion in the *Biologia Centrali-Americana*. The species is closely related to *D. hollandi* n. sp., but readily separated from it by the structures mentioned in the key. The specimens at hand, collected by Mr. and Mrs. H. H. Smith during July, August, and October at Chapada, Brazil, differ slightly from the original description. The metasternal orifice is usually visible. The subcostal area has three rows of areolæ at its widest part. In all specimens before me the head has three obtuse frontal spines, but they are variable in size and not very prominent in a couple of the specimens. According to the original description the type has only a median obtuse frontal spine, the subcostal area two rows of areolæ and the metasternal orifices are not visible. The fourth segment of the antennæ is slightly swollen, brownish, clothed with a few hairs, and about one-half as long as the third.

2. *Dicysta hollandi* n. sp. (Fig. 1, *a* and *b*.)

In general facies and shape of the elytra, very closely related to *D. vitrea*, but easily distinguishable by the structures mentioned in the key, the size of the hood, and shape of the inflated portion of median carina. Length 2.92 mm.; width 1.7 mm.

Head with three frontal spines, the tips of the latter not quite reaching the middle of the first antennal segment. Antennæ long and slender, the third segment slightly curved and almost twice as long as the fourth; fourth segment only slightly enlarged, clothed with a few long hairs. Rostrum reaching almost to the end of the mesosternum. Elytra formed as in *vitrea*, but with the subcostal area biseriata and the tumid elevations slightly smaller, costal area broad, with five rows of areolæ at its widest place. Wings a little longer than the abdomen. Pronotum very coarsely punctate; paranota broad, with four rows of large areolæ, the anterior and posterior margins recurved (See fig. 1, *a* and *b*). Hood a little larger than in *vitrea* and a little longer than high; inflated portion of median carina with the anterior margin nearly truncate and slightly sloping obliquely upwards caudad.

General color of *vitrea* Champion, but without the faint transverse

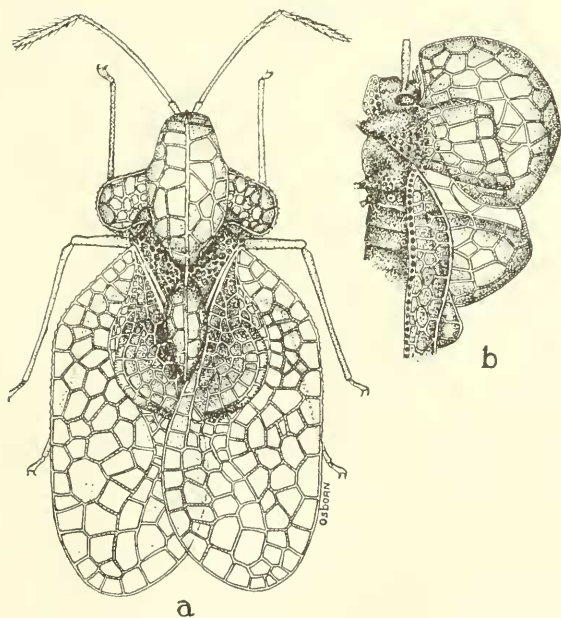


FIG. 1. *Dicysta hollandi* Drake, n. sp. *a*, dorsal view; *b*, lateral view of hood and inflated portion of median carina.

band on the costal area. Described from three specimens, two from Chapada and the other from Santarem, Brazil, collected during August by Mr. and Mrs. H. H. Smith. The species is named in honor of Dr. W. J. Holland, who kindly has sent me for study the specimens of neo-tropical Tingidæ in the Carnegie Museum. *Type* from Chapada, Brazil, in Carnegie Museum; *paratypes* in Carnegie Museum and author's collection.

3. *Dicysta braziliensis* n. sp.

Related to *D. vitrea* Champion and *D. hollandi* n. sp., but very distinct and readily separated from either of these forms by the much narrower paranota, and the much less elevated hood and bladder-like process of the median carina; the elytra are widened posteriorly. Length 2.79 mm.; width 2.09 mm. (through tumid elevations of elytra).

Head with three moderately long frontal spines, the lateral ones directed inwardly with their points touching, the median closely appressed to the surface of the head. Antennæ with the first segment about three times the length of the second, the third and fourth segments wanting. Rostrum reaching a little beyond the meso-metathoracic suture, pronotum rather coarsely punctate, paranota slightly reflexed, narrow, biseriate, the areolæ moderately large, but smaller than those of the hood. Hood very long, with the sides slightly compressed, shaped very much like the hood in *Corythucha* (hood entirely covers the head, but placed much farther back on the pronotum) nearly twice as long as high. Posterior hood-like process of median carina with its height and length subequal, about half as long as the hood, the anterior margin nearly truncate and sloping obliquely backwards. Median carina connected with the hood a little below the crest, with three large areolæ between hood and inflated portion of median carina, and with three small areolæ under the raised posterior portion of hood, with the sides somewhat compressed, narrower than the hood, rounded posteriorly. Elytra widened posteriorly, widest near the apex; costal area with five rows of areolæ at widest part (one at base and enlarging to five at widest part); subcostal area with a single row of areolæ at the base and enlarging to two posteriorly; tumid elevations not very large; discoidal area broadly rounded distally, with four rows of cells at widest part. Wings a little longer than the abdomen.

General color brownish. Body beneath dark brown or blackish, the abdomen lighter. Basal segments of the antennæ dark brown. Nervures of paranota, elytra, hood, and median carina dark brown, part of them more or less testaceous. Legs brownish.

Described from a single male specimen (*type*), taken at Santarem,

Brazil, in Carnegie Museum. This species is so very distinct that I feel entirely justified in describing it from a single example.

4. *Dicysta smithi* n. sp.

Differs from *D. vitrea* Champion and the new species described above by its much narrower form, the biseriate costal area, and the pyriform shape of the hood. The median carina is not strongly raised nor areolate between its inflated posterior process and hood, and, moreover, it is connected with the latter structure at the base. Length 3.34 mm.; width 1.32 mm.

Moderately elongate and oblong. Head with three porrect frontal spines, the median a little longer than the lateral ones and not quite as long as the first antennal segment. Rostrum reaching to the meso-metasternal suture. Antennæ long and slender, the third segment slightly curved and two and two-thirds times the length of the fourth; fourth segment a little swollen, clothed with numerous short hairs, a little more than twice as long as the first and second segments taken together. Hood moderately large, pyriform, its height slightly greater than its length and one and two-fifths times its width. Posteriorly bladder-like process of median carina a little higher and longer than the hood, rather broadly rounded above, the sides somewhat compressed and much narrower than the hood. Paranota moderately wide, not strongly reflexed, mostly triseriate, the areolæ along the outer margin much larger than the others. Pronotum coarsely punctate, shining. Wings considerably longer than the abdomen. Elytra widest a little in front of the middle, broadly rounded at the tips; costal area moderately wide, biseriate, the areolæ large and mostly pentagonal; subcostal area with three rows of areolæ at its widest place; tumid elevations moderately large, occupying most of subcostal and discoidal areas.

General color testaceous, the areolæ hyaline and somewhat iridescent. Legs and antennæ yellowish brown, the apical segment of the latter entire brown. Pronotum brown. Body beneath dark brownish, slightly tinged with red, the eyes black. A few nervures on tumid elevation and a clouded spot in sutural area fuscous.

Described from three females, taken during July by Mr. and Mrs. H. H. Smith at Chapada, a small village of Matto Grosso, Brazil, about 25 miles E. N. E. of Cuyabá. *Type* in Carnegie Museum; *paratypes* in Carnegie Museum and author's collection.